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1 Mapping the Interface Description Language type model into C

Shannon, K.; Snodgrass, R.;

Software Engineering, IEEE Transactions on , Volume: 15 , Issue: 11 , Nov. 1989

Pages:1333 - 1346

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A Web Computing Environment for the SLICOT Library
(2001) (Make Corrections) (1 citation)

Erik Elmroth, Pedher Johansson, Bo Kagström, Daniel Kreßner



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Abstract: A prototype web computing environment for computations related to the design and analysis of control systems using the SLICOT software library is presented. The web interface can be accessed from a standard world wide web browser with no need for additional software installations on the local machine. The environment provides user-friendly access to SLICOT routines where run-time options are specified by mouse clicks on appropriate buttons. Input data can be entered directly into the web... ([Update](#))

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...design are given in Section 4. **Conclusions and future work are presented in Section 5, mainly to show how the software library SLICOT [10, 11] bene ted from this work and how other libraries could bene t, too.** 2 A User s Point of View The web computing environment can be...

Cited by: [More](#)

Semi-Automatic Generation of Web-Based Computing.. - Johansson, Kressner ([Correct](#))

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0.5: A Web Computing Environment for the SLICOT Library - Elmroth, Johansson.. (2001) ([Correct](#))

0.2: Improving the efficiency and accuracy of the MATLAB Control.. - Sima, Benner, al. ([Correct](#))

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1.4: Model Reduction Routines for SLICOT - Varga (1999) ([Correct](#))

1.4: A MATLAB MEX-file environment of SLICOT - Mehrmann, Sima, Varga, Xu (1999) ([Correct](#))

1.4: WGS Newsletter - Distributed By ([Correct](#))

BibTeX entry: ([Update](#))

Elmroth, E., Johansson, P., K agstr om, B. Kressner, D.: A web computing environment for the SLICOT library. The Third NICONET Workshop on Numerical Control Software (2001) 53-61 <http://citeseer.ist.psu.edu/elmroth01web.html> [More](#)

```
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  author = "E. Elmroth and P. Johansson and B. agstr and D. Kressner",  
  title = "A web computing environment for the SLICOT library",  
  text = "Elmroth, E., Johansson, P., K agstr om, B. Kressner, D.: A web computing  
  environment for the SLICOT library. The Third NICONET Workshop on Numerical  
  Control Software (2001) 53-61",  
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Citations (may not include all citations):

139 Society for Industrial and Applied Mathematics (context) - Anderson, Bai et al. - 1999

59 A Schur method for solving algebraic Riccati equations (context) - Laub - 1979

18 SLICOT - A Subroutine Library in Systems and Control Theory - Benner, Mehrmann et al. - 1999

15 a Matrix Riccati Equation of Stochastic Control (context) - Wonham - 1968

14 GEMM-based level 3 BLAS: High-Performance Model Implementati.. - Kagstrom, Ling et al. - 1998

7 GEMM-based level 3 BLAS: Portability and Optimization Issues (context) - Kagstrom, Ling et al. - 1998

5 volume 200 of Pure and Applied Mathematics: A Series of Mono.. (context) - Sima, Linear-Quadratic - 1996

Documents on the same site (<http://www.math.tu-berlin.de/~kressner/pubs.php>): [More](#)

The Periodic QR Algorithm is a Disguised QR Algorithm - Kressner ([Correct](#))

An Efficient And Reliable Implementation Of The Periodic Qz.. - Kressner ([Correct](#))

Large Periodic Lyapunov Equations: Algorithms and Applications - Kressner (2003) ([Correct](#))

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Type Inference with Constrained Types Martin Sulzmann Yale University

www.cis.upenn.edu/~bcpierce/fool/sulzmann.ps.gz[Rule-Based Query Optimization, Revisited - Warshaw, Miranker \(1999\)](#) (Correct) (1 citation)

*Lane B. Warshaw Daniel P. Miranker Department of Computer Sciences and The Applied Research

www.ari.utexas.edu/~warshaw/papers/rule-opt99.ps[MIX\(FL\): a kernel language of mixin modules - Ancona \(1996\)](#) (Correct)rules ensures that the **language** supports separate compilation. The denotational semantics of theftp.disi.unige.it/pub/person/Ancona/D/Disi-TR-96-23.ps.gz[Do We Need the Closed-World Assumption in Knowledge Representation? - Hustadt \(1994\)](#) (Correct) (2 citations)

Do we need the closed-world assumption in knowledge representation?

sunsite.informatik.rwth-aachen.de/Publications/CEUR-WS/Vol-1/hustadt-long.ps[COSSAP-MATLAB Cosimulation - Lambrette, Schmandt, Post, Meyr \(1995\)](#) (Correct)

COSSAP-MATLAB Cosimulation Uwe Lambrette, Bernd Schmandt,

COSSAP-MATLAB Cosimulation Uwe Lambrette, Bernd

www.iss.rwth-aachen.de/Personen/.../Projekte/Tools/papers/cad_Lambrette95icspai.ps.gz[Drafting ER and OO Schemas in Prototyping Environments - Meyer, Westerman, Gogolla \(1996\)](#) (Correct)

Bernd Meyer a Gerd D. Westerman b Martin Gogolla c a Monash University, Dept. of Computer Science,

www.db.informatik.uni-bremen.de/publications/Meyer_1996_DKE.ps.gz[Defining and Parsing Visual Languages with Layered Graph Grammars - Rekers, Schürr \(1997\)](#) (Correct) (14 citations)

1 J. Rekers* And A. Sch Urry department Of Computer Science, Leiden University, Niels Bohrweg 1,

cul.unige.ch/eao/www/Visual/local/RekersSchuerr96.ps.gz[METU Interoperable Database System - Dogac Dengi \(1995\)](#) (Correct) (9 citations)

METU Interoperable Database System A. Dogac, C. Dengi, E. Kilic, G. Ozhan, F. Ozcan, S. Nural, C.

ftp.srdc.metu.edu.tr/pub/mind/papers/sigmodrec95.ps.Z[Measuring and Optimizing CORBA Latency and Scalability Over... - Gokhale, Schmidt \(1998\)](#) (Correct) (15 citations)

Measuring and Optimizing CORBA Latency and Scalability Over High-speed

siesta.cs.wustl.edu/~schmidt/ieee_97.ps.gz[The Design and Implementation of SPECS: An Alternative C++... - Werther, Conway](#) (Correct)

The Design and Implementation of SPECS: An Alternative CSyntax Ben Werther & Damian Conway Department of

www.cs.monash.edu.au/~damian/papers/PS/SPECS.ps[CC++, pC++, Charm++ and Orca: Languages for Parallel Programming - Niemiec \(1993\)](#) (Correct)

CCpCCharmand Orca: Languages for Parallel

www.npac.syr.edu/projects/hpsin/doc/ccpp.ps[Semantic Validation of VHDL-AMS by an Abstract State Machine - Sasaki, al. \(1997\)](#) (Correct) (7 citations)

2 1 Analog & Mixed Signal LSI Design Dept. Toshiba Corp. 2 Dept. of Computer Science, Tokyo Institute

ftp.eecs.umich.edu/groups/gasm/vhdl-ams.ps.gz[A Protection Scheme for a CORBA Environment - Hagimont, Huet, Mossière \(1997\)](#) (Correct) (1 citation)

A Protection Scheme for a CORBA Environment D. Hagimont 1, O. Huet, J.

sirac.imag.fr/PUB/97/97-ecoop-wkshp-PUB.ps.gz[The OPERA Toolbox for Linear and Discrete Optimization - Holmström \(1998\)](#) (Correct)

S-721 23 Vasteras, Sweden E-Mail: Hkh@mdh.se The Matlab Toolbox Opera Tb Is A Set Of Matlab M-Files,

and Discrete Optimization Kenneth Holmstrom a a Center of Mathematical Modeling, Department of D. M. Gay, and B. W. Kernighan. AMPL -A Modeling Language for Mathematical Programming. The Scientific www.ima.rwth.se/forskning/forskare/.../tom/tom-preprints/Annals_of_Operations_Research_1998-opera.ps.gz

Uniform Closures: Order-Theoretically Reconstructing Logic.. - Giacobazzi, al. (1998) (Correct)

Uniform Closures: Order-Theoretically Reconstructing Logic

[ftp.di.unipi.it/pub/Papers/giacobazzi/ic98.ps.gz](http://di.unipi.it/pub/Papers/giacobazzi/ic98.ps.gz)

Rapid Prototyping of Specification Language Implementations - Leucker, Noll (1998) (Correct)

syntax and semantics supports the development of compilers and of verification tools. This paper

www-i2.informatik.rwth-aachen.de/leucker/PUBLICATIONS/rsp99.ps.gz

Multi-Language Programming Environments for High Performance Java.. - Getov (1999) (Correct) (1 citation)

Programming Environments for High Performance Java Computing Vladimir Getov 1 Paul Gray 2 Sava

www.cs.cf.ac.uk/hpjworkshop/vladimir.ps

MultiMATLAB: Integrating MATLAB with High-Performance.. - Menon, Trefethen (1997) (Correct) (6 citations)

MultiMATLAB: Integrating MATLAB with High-Performance Parallel Computing Vijay

www.supercomp.org/sc97/program/TECH/MENON/MENON.PS

Elements of MATLAB - Fosdick, Jessup, Schauble (1988) (Correct)

Elements of MATLAB Lloyd D. Fosdick Elizabeth R. Jessup Carolyn J.

ftp.cs.colorado.edu/pub/HPSC/ElementsOfMATLAB.ps.Z

Experiments with "HPJava" - Carpenter, Chang, Fox, Leskiw, Li (1997) (Correct) (7 citations)

Experiments with "HPJava" Bryan Carpenter, Yuh-Jye Chang, Geoffrey Fox, Donald

www.npac.syr.edu/projects/javaforcse/cpande/suhpjava.ps

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The MathWorks, Inc., Natick, MA. *Matlab Reference Guide*, 1994.



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[Control Of Walking In A Quadruped - Robot With Stiff](#) (Correct)

....in Appendix A. **Even** though for controller development we assume the input to be the hip angle, for purposes of simulation we need a torque input model. A high gain PD controller will track the desired reference trajectory in OE b . Eq. 2. 1) **was used in developing a numerical simulation in MATLAB [6].** For verification, the results of this simulation were compared with the results obtained 9 from a MOBILE simulation. In the MOBILE simulation the user specifies only the kinematic chain and mass, inertia properties describing the system under analysis, but not the EOM. **This comparison, presented**

The Math. Works Inc. *MATLAB Reference Guide*. 1992.

[Design And Control Of A Simplified Stewart - Platform For Endoscopy](#) (Correct)

....direction. In the simulation and in the experiment, k OE is taken to be 400; 000g cm cm) the rounded average. **Lynx**, a real time unix operating system donated from Lynx Real Time Systems, Inc. **runs** the control loop at 500Hz on a 486DX 33MHz IBM clone. **The PD gains were designed in Matlab [4] using the linear quadratic regulator based on the linear error dynamics at the origin.** The controller used in the experiment and in the simulation differ in that the feedforward term in the simulation is a function of the current configuration and is a function of the desired position in the

MathWorks, Natick, Ma. *Matlab Reference Guide*, 1992

[Unknown - This Work Was](#) (Correct)

....in fig 1.2, depends on the position of the beacon ($U_x ; U_y$) and of the position ($P_x ; P_y$) and orientation P of the camera, cf. figure 1.2, according to $\text{ff}(P; U) \text{atan2}(U_y \text{Gamma } P_y ; U_x \text{Gamma } P_x) \text{Gamma } P ; 1. 1)$ **where atan2 is the four quadrant inverse tangent as explained in [18].** The vector ($P_x ; P_y ; P$) is called the meter state. A somewhat simpler representation of the same equation can be obtained as follows. As can be seen in figure 1.2 the vector between the camera center and the beacon can be written as $\cos(\text{ff } P) \sin(\text{ff } P) U_x \text{Gamma } P_x U_y$

The Math Works Inc. *MATLAB Reference Guide*. The Math Works, Inc., 1992.

[Parallel and Fully Recursive - Multifrontal Sparse Cholesky](#) (Correct)

....create larger supernodes [6] shared memory codes, is sensitive to the performance characteristics of the shared memory system, and that when the memory is too slow our code s performance degrades. **Furthermore, the sequential version of our code has been incorporated by the developers of MATLAB [40] into the next release as the default sparse positive definite solver that the linear solve operator calls.** While this implies nothing concerning the parallel code, it does suggest that the sequential code, which is essentially identical to the parallel one except for the use of C function calls

The MathWorks, Inc, Natick, MA. *MATLAB Reference Guide*, Aug. 1992.

[Accurate and Automatic Surveying of Beacon Positions for.. - Oskarsson, Åström \(1998\)](#) (Correct)

.... **ff dened in g 1, depends on the position of the beacon ($U_x ; U_y$) and of the position ($P_x ; P_y$) and orientation P of the scanner, cf. gure 1, according to $\text{ff}(P; U) \text{atan2}(U_y \text{Gamma } P_y ; U_x \text{Gamma } P_x) \text{Gamma } P ; 1)$ **where atan2 is the four quadrant inverse tangent as explained in [5].** The vector ($P_x ; P_y ; P$) is called the meter state. The actual measurement ff deviates from the true angle, due to noise and quantization eoeects in the laser scanner: $\text{ff} = \text{ff}(P; U) \text{Deltaff} : 2) x y (P_x ; P_y) U_x ; U_y) P \text{ff}(P; U)$ Figure 1. **The gure illustrates the measured****

The Math Works Inc. *MATLAB Reference Guide*. The Math Works, Inc., 1992.

[Quantitative Performance Modeling of Scientific Computations and.. - Toledo \(1995\)](#) (2 citations) (Correct)

....added. **The** open architecture enables benchmaps system to use the best available parameter estimation algorithms using a uniform interface, and to add special purpose parameter estimation algorithms. **I have implemented two general purpose parameter estimation modules, one for interfacing to MATLAB [108], an interactive mathematical software package, and another for interfacing to LOQO [121] an linear and quadratic optimization package.** The BENCHCVL system adds one special purpose parameter estimation module for modeling data caches, which is described in Chapter 4. **The** MATLAB interface uses an

....and coded by the Tzu Yi Chen and the author. **This** section describes the implementations, and the next section shows that the performance of the Krylovbasis algorithm outperforms conventional conjugate gradient algorithms when executed outof core. **We have prototyped all the algorithms in MATLAB [108], an interpreted, interactive environment for numerical computations.** The prototypes served to check the correctness of the algorithms (we have found one bug in a published algorithm) to study their numerical properties, and to verify that subsequent implementations are correct. **A** similar

The MathWorks, Inc., Natick, MA. *MATLAB Reference Guide*, August 1992.

Object-Oriented Behavioural Modelling of Mechatronic Systems - Kasper, Koch (1995) (Correct)

....Integrating existing tools There is no need to implement all modelling concepts mentioned above once again in an object oriented environment. **Objects** offer the flexibility to integrate existing tools, if these only provide some simple interfaces. **Block diagram based tools like MATLAB SIMULINK [Math 92] and ASCET [Eppi 90] can produce C language description for models represented as a block diagram.** These C based models can be handled like objects; they implement the model's states and parameters and offer functions to transmit inputs, change parameters, calculate derivatives and outputs. **Tools**

The MathWorks Inc., *MATLAB Reference Guide*, 1992

Users' Guide to NetSolve V1.4 - Arnold, Agrawal, Blackford.. (2001) (3 citations) (Correct)

....other computer systems. **Other** libraries demand considerable programming effort from the user. **While** several tools have been developed to alleviate these difficulties, such tools themselves are usually available on only a limited number of computer systems and are rarely freely distributed. **Matlab [matlab] and Mathematica [mathematica] are examples of such tools.** These considerations motivated the establishment of the NetSolve project. **NetSolve** (<http://icl.cs.utk.edu/netsolve>) project. **The** basic philosophy of NetSolve is to provide a uniform, portable and efficient way to access computational

....to NetSolve. **To** make these four files accessible to Matlab, the user must modify the MATLABPATH environment variable as: UNIX setenv MATLABPATH NETSOLVE ROOT bin NETSOLVE ARCH It is also possible to use the Matlab command addpath. **For more information about mex files, the user can refer to [matlab].** In the following sections, the user will learn to call four new functions from Matlab: netsolve(netsolve nb(netsolve err(and netsolve errmsg(What to Do First Let us assume that the user has compiled the Matlab interface, set an agent name, started a Matlab session and is now ready

1992, The MathWorks, Inc., *MATLAB Reference Guide*.

Utilizing Sensor Data Redundancy to Gain Robustness in the.. - Maryniak, Graefe (1998) (Correct)

....by (even small) measurement noise, which means a poor quality. **We** investigated the two norm condition number 2. **The two norm 2 represents the largest amplification of length that the respective matrix is able to induce on a vector [Press et al. 1995] The condition number may, according to [The MathWorks 1993] and [Shahian, Hassul 1993] rather efficiently be computed by the ratio of the largest to the smallest singu 2 For matrices, it is exactly termed the matrix norm subordinate to the vector two norm [Bjrck 1996] IROS; Kyongju, October 1999 30 50 100 200 0 200 400 600 sequence number**

The MathWorks (1993): *MATLAB Reference Guide*. The MathWorks, Inc., Natick. p. 104.

NetSolve's Network Enabled Server: Examples and Applications - Casanova, Dongarra (1999) (2 citations) (Correct)

....running servers can be found on the NetSolve web page located at <http://www.cs.utk.edu/netsolve> 1.3 The Client Interfaces A major concern in designing NetSolve was to provide several interfaces for a wide range of users. **NetSolve can be invoked through C, Fortran, Java, as well as on MATLAB [1].** In addition, there is a Web based Java GUI which allows problems to be and solved remotely. **Another** concern was keeping the interfaces as simple as possible. **For** example, there are only two calls in the MATLAB interface, and they are sufficient to allow users to submit problems to the

NetSolve

The Math Works Inc. *MATLAB Reference Guide*. 1992.

Computer Graphics and Visualization - Za Ti On (Correct)

....in computer graphics. **The** current version of Matlab is able to handle colors and shadings and images, and so will be used in these exercises. **You** should be familiar with the tutorial, Elements of Matlab [Fosdick et al. 93] before reading this chapter. **You may also wish to consult Matlab manuals [MW 92a] MW 92b]** For further information on computer graphics, see *Fundamentals of Interactive Computer Graphics* [Foley et al. 90] A good source of information, specifically on the human eye and color vision, can be found in Gonzalez Woods [Gonzalez Woods 92] and Travis [Travis 91] Concepts and

....possible to obtain a hardcopy of the image using the print function. **Here** the PostScript image is requested by the dps option and is stored in the file named stripes1.ps. **For more information on the figure, colormap, image, axes, axis, or print functions, refer to the Matlab Reference Guide [MW 92a] or use the help function.** Exercise 2.4.1 Run the program, stripes1.m, under Matlab. **Study** both the script and the results of running the script. **Create** and run a new program, stripes2.m, which does the same thing, but allows the brightness levels of the stripes to increase logarithmically from

The MathWorks, Inc., South Natick, MA. [Aug 1992]. *Matlab: Reference Guide*.

Comparison of Off- and On-Line Simulation for Control of Wind... - Zhang, Roschke (Correct)

....the advantageous stability margins of an LQR algorithm while maintaining the basic mathematics of LQG. **Off line simulation Design of an LQG LTR controller that is to specify a control force to be applied at the first floor of the laboratory structure is implemented through MATLAB and SIMULINK (Mathworks, 1998).** Figure 2 is a SIMULINK model of the controller. An 0.05 sec transport time delay is taken into account during numerical simulation. **Width** of the connecting lines represents the dimension of the data vector that is being transmitted. **The** plant block represents the state space model of the

....2 nd floor 3 rd floor 4 th floor Fig. 3 Comparison of controlled and uncontrolled acceleration of each floor conditions at an actual building site. **Here, a commercial digital signal processor (DSP) system, dSPACE, is used in conjunction with MATLAB, SIMULINK, and the Real Time Workshop (Mathworks, 1998) software.** It serves as an interface between off line simulation and on line, real time simulation and overcomes some of the drawbacks of its off line counterpart. **Figure 4** shows how a typical DSP system is configured. **The** control algorithm is realized as a MATLAB SIMULINK program and compiled

Mathworks (1998). *Matlab Reference Guide*. The MathWorks, Inc., Natick, MA.

Parallel and Distributed Scientific Computing - A.. - Petitet.. (Correct)

....Algebra, Optimization, Fast Fourier Transforms, etc. 4.1.2 The client interfaces. **A** major concern in designing NetSolve was to provide several interfaces for a wide range of users. **NetSolve** can be in X. **Parallel and Distributed Scientific Computing 443 voked through C, Fortran, Java, Matlab [Mat92] and Mathematica [Wol96]** In addition, there is a **Web enabled Java GUI**. Another concern was keeping the interfaces as simple as possible. **For** example, there are only two calls in the MATLAB interface, and they are sufficient to allow users to submit problems to the NetSolve system. **Each** interface

The Math Works Inc., *MATLAB Reference Guide*, The Math Works, Inc., 1992.

Adaptive Scheduling for Task Farming with Grid Middleware - Casanova, Kim, Plank.. (1999) (5 citations) (Correct)

....fault tolerance mechanisms. **Note** that there can be multiple instances of the NetSolve agent to manage a confederation of servers. **The NetSolve Client: The user can submit (possibly simultaneous) requests to the system and retrieve results with one of the provided interfaces (C, Fortran, Matlab [18], Mathematica [19] Java APIs or Java GUI)** **Current Status of NetSolve: At this time, a pre version of NetSolve 1.2, containing full fledge software for all UNIX flavors, Win32 C, and Matlab APIs, can be downloaded from the homepage at: <http://www.cs.utk.edu/netsolve>** The NetSolve Users Guide

The Math Works Inc. *MATLAB Reference Guide*. The Math Works Inc., 1992.

Reproducibility Standards for Wavelet Transform Algorithms - Taswell (1998) (Correct)

....III D are maximum mixed value errors unless noted otherwise. E. Software and Hardware Numerical and graphical results reported here were computed with Version 4.4a3 (29 Dec 96) of W AVB# X Software [17] 18] running under Version 4. 2c.1 (3 Oct 94) of the MATLAB technical computing environment [25] on a Toshiba Tecra 720CDT with a 133 MHz Pentium and the Windows 95 operating system. III. Results All computations were performed for a critically sampled wavelet transform multirate filter bank system with $R = M = 2$. In analogy with the use of the term wavelet to refer to filters and

The MathWorks, Inc., Natick, MA, MATLAB Reference Guide, Aug. 1992.

Solutions and Ambiguities of the Structure and Motion.. - Åström, Oskarsson (1999) (1 citation) (Correct)

....xed. The bearing θ defined above, depends on the position of the beacon $(U_x; U_y)$ and of the position $(P_x; P_y)$ and orientation P of the scanner according to $\theta(P; U) = \text{atan2}(U_y - P_y; U_x - P_x) - P$ where atan2 is the four quadrant inverse tangent as explained in [6]. The vector $(P_x; P_y; P)$ is called the camera state. The above equation (1) for the measured bearing is non linear. A somewhat simpler representation of the same equation can be obtained as follows. Introduce alternative representations for the bearing $\theta = \cos(\theta) \sin(\theta)$ for

The Math Works Inc. MATLAB Reference Guide. The Math Works, Inc., 1992.

Users' Guide to NetSolve version 1.2.beta - Casanova, Dongarra, Karainov.. (1998) (Correct)

....other computer systems. Other libraries demand considerable programming effort from the user. While several tools have been developed to alleviate these difficulties, such tools themselves are usually available on only a limited number of computer systems and are rarely freely distributed. Matlab [1] or Mathematica [2] are examples of such a tools. These considerations motivated the establishment of the NetSolve project. The basic philosophy behind NetSolve is to provide a uniform, portable and efficient way to access computational resources over a network. NetSolve is a client server ...

....Matlab interface to NetSolve. Modifying the MATLABPATH environment variable as `setenv MATLABPATH NETSOLVEROOT bin NETSOLVEARCH` will make these four files accessible to Matlab. It is also possible to use the Matlab command `addpath`. For more information about mex files, the user can refer to [1]. Basically, the user will now be able to call four new functions from Matlab: `netsolve`, `netsolve nb`, `netsolve err` and `netsolve errmsg`. The following sections explain how to use those functions. 4.2.2 What to Do First Let us now assume that the user has compiled the Matlab interface,

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The Math Works Inc. MATLAB Reference Guide. 1992.

The RPM Toolbox: A System for Fitting Linear Models to Frequency.. - Pfeffer (1993) (1 citation) (Correct)

....and two types of algorithms are widely used. These algorithms are the Nelder Mead simplex method and the direction set methods of Powell; both are described in [15, section 10.4 and 10.5] For this problem, the Nelder Mead method was used, since it was already implemented in MATLAB as `fmin` [10]. For model fits with a large number of parameters, such searches can be time consuming. One attractive option is to use a faster computer. However, if a sufficiently fast machine is not available, other means of speeding up the search are desirable. One such heuristic method is to break

The MathWorks Inc. MATLAB Reference Guide. Natick, MA, January 1990. Version 4.0-SUN.

A Newton Acceleration Of The Weiszfeld Algorithm For Minimizing The .. - Li (1996) (5 citations) (Correct)

....min $\sum_{i=1}^n \|x - x_i\|_k$ where $A = [A_1; \Delta A_1; \Delta A_2; \Delta A_3; \Delta A_4; \Delta A_5; \Delta A_6; \Delta A_7; \Delta A_8; \Delta A_9; \Delta A_{10}]$ and ΔA_i is a positive integer. Here we follow notations in Matlab [16]: the symbol `;` augments columns to a matrix of the appropriate dimension while the symbol `;` augments rows to a matrix. In subsequent presentation, we assume that A has full row rank and denote the Euclidean norm by $\| \cdot \|_2$. A rectangular multifacility location problem is a linear ...

....for major operations required by N Weiszfeld. We demonstrate that, the additional per iteration cost of the proposed N Weiszfeld algorithm over the original Weiszfeld algorithm is often negligible as problem size increases. Both the Weiszfeld algorithm and N Weiszfeld are implemented in Matlab [16] on a Sun Sparc 2 workstation. The Weiszfeld algorithm is obtained by simply setting $k = 1$ in N Weiszfeld implementation. We report the following characteristics of the computed solution: 1. **opt**: an optimality accuracy measure, $\text{opt} = \max_j |c_j - \lambda_j|$ 2. **deg**: a possible

THE MATHWORKS INC., *Matlab Reference guide*, The MathWorks, Natick, Mass, 1992.

Processing a Class of Ophthalmological Images Using an... - Paplinski (Correct)

....2 s 2)l jruj 2 s 2 P (ru) if jruj s (4) where the projection matrix, P (ru) is: P (ru) 1 jruj 2 2 6 6 4 g 2 2 g 1 g 2 g 1 g 2 g 2 1 3 7 7 5 , where ru = g 1 g 2] 5) 3. **1 Implementation details Implementation details will be presented in the form of a MATLAB [13] script slightly simplified for brevity.** Let U represent a normalised image, each pixel u(x) 2 [0 1] Pixels of the image located outside the lens area are assigned value of 0. We begin with initialisation of the gradient vector and the diffusion tensors: Initialisation of gradient and

MathWorks, *MATLAB Reference Guide*. The MathWorks Inc., 1997. 13

NetSolve: A Network-enabled Server for Solving... - Casanova, Dongarra (2000) (26 citations) (Correct)

....considerable programming effort from the user, who may not have the time to learn the required programming techniques. While a limited number of tools have been developed to alleviate these difficulties, such tools themselves are usually available only on a limited number of computer systems. **MATLAB [1] is an example of such a tool.** These considerations motivated the establishment of the NetSolve project. NetSolve is a clientserver application designed to solve computational science problems over a network. A number of different interfaces have been developed to the NetSolve software so that

Inc The Math Works. *MATLAB Reference Guide*. 1992.

PRECISE User's Guide Version 1.0 --- TR/PA/97/38 - McCoy And Toumazou (1997) (Correct)

..... IA(N 1) JA(1) 89 90 Storage formats for input matrices . JA(NNZ) A(1) A(NNZ) Appendix B MATLAB Graphics Routines Enclosed are example graphics routines to generate the plots described in this document. **The routines make use of the graphics capabilities of MATLAB [18].** B.1 Module 1 Linear Systems Here is an example graphics routine to generate plots of the statistical indicators for linear systems. **Note** that additional information saved in the files is also displayed. The program may be modified to enable interactive specification of the backward error.

The MathWorks. *MATLAB Reference Guide*. The MathWorks Inc., Natick, MA, 1992.

Discovery of First Principle Based on Data-Driven Reasoning - Washio, Motoda (1997) (Correct)

....by the form of the original relation (i) of the theorem 2. **Therefore**, the complexity reduces to $O(2 \log_2 N)$ In any case, it is not very problematic, because the size of a regime is generally quite limited. **We implemented this algorithm by using a commercial formula processing package MATLAB [MAT92].** This algorithm have been tested by various physical laws. The following is an example of the ideal gas equation which forms a unique regime. A regime involving four quantities of pressure p, volume v, mass m and temperature t is given, thus $Q = fp; v; m; tg$. The quantities p, v and m are ratio

The MATH WORKS, Inc. *MATLAB Reference Guide*, 1992.

Multiobjective Genetic Algorithms with Application to Control... - Fonseca (1995) (3 citations) (Correct)

....the engineer a selection of potentially good models for further evaluation. **Additional contributions are: The foundations for a Genetic Algorithm Toolbox for MATLAB (Chipperfield et al. 1994) All genetic algorithm components, as well as all objective functions, were implemented in MATLAB (The MathWorks, 1992a) These routines are now part of a Toolbox currently used in over 100 sites worldwide.** A non parametric technique for the interpretation and visualization of the results of multiple multiobjective optimization runs (Chapter 3) This pro CHAPTER 1. INTRODUCTION 6 vides a description of

....can be studied and or analyzed. In addition to that, EC has also proved useful in addressing complex search and optimization problems effectively, extending the scope of optimization to areas it could not reach before. **Evolutionary computation methods, or Evolutionary Algorithms (EAs) emerged in the late 1960s.** In Germany, Evolutionstrategien (Evolution Strategies, ESs) were developed by Rechenberg (1973; 1994) and Schwefel (1981) whilst in the United States two further approaches arose: Fogel's Evolutionary Programming (EP) Fogel, 1991) and Holland's Genetic Algorithms (GAs) Holland, 1975)

[Article contains additional citation context not shown here]

The MathWorks (1992a). *Matlab Reference Guide*. The MathWorks, Inc.

Stable Segmentation of 2D Curves - Fitzgibbon (1997) (Correct)

....are performed. A flop comprises a single floating point operation, such as a multiplication or addition, and includes the concomitant overheads of subscripting and memory access. **However**, the precise definition of what constitutes a single flop can vary among authors. **Moler's MATLAB system [75], for example, defines addition and multiplication to each contribute one flop, while Golub and van Loan consider one flop to consist of a multiply accumulate.** The MATLAB definition corresponds more closely to the computer used to perform the experiments, on which both multiplication and addition

....sections and expect that the conclusions drawn will extrapolate to the others. **The particular metric chosen is the principal point distance, because it is the geometric measure with the greatest discriminatory power.** **4. 5 Experimental Results All experiments were conducted using the MATLAB system [75].** Eigensystems are solved using the underlying EISPACK routines, while the derivative free minimization needed for the geometric distance algorithm used the Nelder Mead simplex algorithm. **Also**, as the execution speed characteristics of interpreted MATLAB programs are qualitatively different to

The MathWorks, Inc, Natick MA, USA. *MATLAB Reference Guide*, 1992.

Deploying Fault Tolerance and Task Migration with NetSolve - Plank, Casanova, Beck.. (1999) (1 citation) (Correct)

....to Elsevier Preprint 15 March 1999 Grid resources will be ubiquitous. **However**, for the average scientific user, harnessing their power will present a challenge. **Consider** such a user. **In** the world of uniprocessor workstations, his life is relatively simple. **Software packages such as MATLAB [21] and Mathematica [41] enable him to solve a wide variety of numerical problems with a convenient and flexible user interface.** For less standard problems, he may obtain software solutions from a repository like Netlib. **These** are typically rather simple to incorporate into his programming platform.

The Math Works Inc. *MATLAB Reference Guide*, 1992.

Piecewise Differentiable Minimization For Ill-Posed Inverse Problems - Li (1996) (Correct)

....to ensure proper descent directions are defined everywhere. **Let $\#k\# \#m$ denote the optimality measurement below $\# = \#e \#g \#e$, $\# = \max(\max(Dr(g\#) \#(r0)) \max(\max(\#g, 0) 3.6)$ where $0 \# 1$ is a constant and e is the vector of all ones. **We use the Matlab [27] definition for the function max: $\max(x)$ denotes the maximum component of a vector x and the value of $\max(x, y)$ is a vector whose components are the maximum of the corresponding components of x and y .** There are many possible ways to globalize. **An example which works well computationally is****

The MathWorks Inc., *Matlab Reference guide*, The MathWorks, Natick, Mass, 1992.

From Ease in Programming to Easy Maintenance.. - Anlauff.. (Correct)

....language. **Currently** it 2 is implemented using Montages and is being maintained by researchers in control engineering. **For** problems like controller synthesis, state estimation, and recon guration, systems are speci ed in the MLD form using HYSDEL. **This speci cation has to be translated into MATLAB [25] code using techniques described in [8] which are then used for simulation and optimization purposes.** Our implementation is thus a translator from HYSDEL to MATLAB code. **However**, we shall also point out in this paper that in many cases the full features of Montages (like specifying dynamic

The MathWorks Inc., Natick, Mass. *MATLAB Reference Guide*, 1997.

Parallel and Distributed Scientific Computing - A.. - Petitet.. (Correct)

....cover several fields of computational science; Linear Algebra, Optimization, Fast Fourier Transforms, etc. **4.1.2 The client interfaces. A major concern in designing NetSolve was to provide several interfaces for a wide range of users. NetSolve can be invoked through C, Fortran, Java, Matlab [Mat92] and Mathematica [Wol96] In addition, there is a Web enabled Java GUI.** Another concern was keeping the interfaces as simple as possible. **For** example, there are only two calls in the MATLAB interface, and they are sufficient to allow users to submit problems to the NetSolve system. **Each** interface

The Math Works Inc., *MATLAB Reference Guide*, The Math Works Inc., 1992.

Implementation of Primal-Dual Methods for Semidefinite.. - Monteiro.. (1997) (10 citations) (Correct)

....using a normal distribution with mean 0 and variance 1. **This** problem can be expressed as a SDP using $m = N$

symmetric matrices of dimension n Theta n with $n = 2N$. More details can be found in [34] We have chosen $N = 50$ for our tests. We have performed our experiments using MATLAB version 5.0 [11]. For each class of problems, we have generated five problems. For all the problems, we have used a feasible starting point. 30 4.1 Conclusion This subsection presents a description of our observations, and shows the tables and graphics illustrating our numerical results. We start with a

The MathWorks Inc. *MATLAB Reference Guide*. The MathWorks Inc., Natick MA, 1992. 37

GSMsim - A MATLAB Implementation of a GSM Simulation Platform - Ekstrøm, Mikkelsen (1997) (Correct)

....dT division of Telecommunications, Aalborg University Page 1 of 124 R 97 1004 December 1997 representation is chosen as this reduces the required simulation sample rate and thus also the overall simulation time and memory consumption. Moreover, it is chosen to implement the tool as an MATLAB [13] toolbox, as this provides an easy entry to implementing the simulation tool. Also, an excellent graphics tool is readily at hand when using MATLAB. This makes illustrating and verifying the product an easy task. To analyze specific front end architectures and designs for GSM operation one just

The MathWorks, Inc., Cochituate Place, 24 Prime Park Way, Natick, Mass. 01760. *MATLAB Reference Guide*.

A Computational Algorithm for Minimizing Total Variation in... - Li, Santosa (1996) (7 citations) (Correct)

....incremental nature of our algorithm, we propose in xIV to use it in an adaptive interactive manner, suited for the situation when knowledge about the variance of a random noise is unavailable or unreliable. To illustrate our computational algorithm, we have conducted some experiments in Matlab [15] using a Sun Sparc 2. We generate data (blurred, noisy images) by convolving a known image with a given blurring function, and adding measured amounts of random noise. The amount of noise in the data is summarized by the signal to noise ratio (SNR) SNR def = 10 log variance of the blurred

.... e.g. $j_{cs} k_{def} = \max(k_{diag}(r_k) g_k \Gamma_k) k_{1j} df k_{def} = \max(\max(\Gamma_{k1}; 0) \max(\max(j_{kj} \Gamma_{jk} k_j; 0) k_{def} = \max(j_{cs} k; j_{df} k) 0:9 \max(j_{cs} k; j_{df} k) 16)$ where 0 is a vector of all zeros and the operation max is as defined in Matlab [15]. Similar to the algorithm in [23] we can globalize the Newton step (15) by computing a descent direction as below $(1 \Gamma_k) j_{k1} j_k) A T A J k_{diag}(j_k \Gamma_k (1 \Gamma_k) k_j) J T k_{Gammadiag}(j_k j) \# s k_{1\#} = \Gamma_0 diag(j_r j) g_k \# : 17)$ The

[Article contains additional citation context not shown here]

The MathWorks Inc., *Matlab Reference guide*, The MathWorks, Natick, Mass, 1992.

Calculation of MOSFET Gate Impedance - Kolding (1998) (Correct)

.... the first order approximation [5, 8] When the second order approximation is used, it is typically modified to an improved version [5, 8, 3] where $\tanh \#x\# 3x \times 2$: Enhanced 2nd order approximation (9) To illustrate the accuracy of these approximations, they are compared in MATLAB [6]. By inserting worst case CMOS values and assuming that the frequency of interest is less than 20GHz, it can be argued that the magnitude $j\#w_j$ (the argument of the hyperbolic tangent) is always less than 1. The values of $\tanh \#jx\#$ are shown in Figure 4. Note that the argument is mainly negative

The MathWorks, Inc. *MATLAB Reference Guide*, August 1992.

Circular Region Extraction Using a Filtered Radial Gradient.. - Paplinski, Boyce (Correct)

....which lie outside it. This allows a reduction of the size of the picture frame, and unification of the background pixels. ffl In addition, the bright reflection spot in the centre of the image is removed using a thresholding method. 3 Details of the program The program has been written in MATLAB [2]. Firstly, an image in the raw format is transferred from the file specified by imgfn to the variable anl, and then visualised (see Fig.1) $imgfn = eye1.raw$; $imgsz = 753, 714$ $anl, c] fread(fopen(imgfn) imgsz, uint8) anl = anl$; $figure(1) colormap(gray(256) image(anl) \dots$

MathWorks, *MATLAB Reference Guide*. The MathWorks Inc., 1994.

Frequency Sensitive Competitive Neural Network with an... - Shnaider, Paplinski (1994) (Correct)

....threshold f_{th} . The actual selection of the threshold f_{th} depends on input data statistics and is normally chosen to be three to four times larger than the average winning frequency over the entire training set. 3. 2 Implementation The FSCL

algorithm has been implemented and tested using MATLAB [5]. The MATLAB implementation consists of the main function FSCL and two utility functions blkM2vc and vc2blkM. The main function performs initialization, training, that is, generation of the codebook, encoding of the selected image, and decoding of the encoded image. The utility functions are

The Math Works, Inc., *MATLAB Reference Guide*.

Computational Aspects of Segmentation of a Class of Medical.. - Paplinski, Boyce (Correct)

....segmentation of a test image. The selected test image is a sub image of a complete posterior capsule opacification image from Figure 1.1. **Conjugate Images** . A.P.Papli nski, J.F.Boyce 1. **2 Extraction of the lens image from the recorded image frame** The prototype scripts were written in MATLAB [5]. Segmentation of images was normally performed using the segmentation tools from the Image Processing Group at King s College London. The first pre processing step involves extraction of the lens image from the recorded image frame of the size 1536 Theta 1024 pixels. $isz = 1536\ 1024]$ $frm = \dots$

MathWorks, *MATLAB Reference Guide*. The MathWorks Inc., 1994.

A Fully Automated Bandwidth Selection Method for Fitting.. - Opsomer, Ruppert (1996) (Correct)

.... The bandwidth selection component will be based on the Direct Plug In (DPI) method of Ruppert et al. 21] while the computation of the additive fits will rely on the backfitting algorithm of Buja et al. 5] The computer code for the implementation of the method is written in the Matlab v4.2c [17] programming environment and is available from the first author. The outline of the proposed method is depicted in Figure 1. In Step 1, a piecewise polynomial regression is performed to provide crude estimates of σ^2 and (p_1, p_3) with the number of pieces N_d for each covariate selected

The MathWorks, Inc., Natick, MA. *Matlab Reference Guide*, 1994.

Implementation Of Primal-Dual Methods For Semidefinite.. - Monteiro.. (1997) (10 citations) (Correct)

....m, and the entries of the $N \times N$ matrix A are generated using a normal distribution with mean 0 and variance 1. This problem can be expressed as a SDP using $m+1$ matrices of size $n \times n$, where $n = 2N$. For more details, see [30] We have performed our experiments using MATLAB version 5.0 [11], **with mex subroutines to perform the products of specially structured matrices, in a SUN Ultra 1 station.** For the two classes of problems above and for each $m = 5; 10; 50$, we have generated five problems of dimension $(m; n)$ with $n = 120$. All the problems were solved using a feasible

The MathWorks Inc. *MATLAB Reference Guide*. The MathWorks Inc., Natick MA, 1992.

Efficient Characterization And Simulation Of The IC Manufacturing.. - Niu (1994) (Correct)

....Data XF, interface builder Tk Motif, XT, OpenLook Xintrinsics Xlib File, Directory Database Object Oriented Database CAD Framework Bourne shell, C shell Tcl RPC Figure 5.1: The three dimensions of tool integration. **In this thesis, we use Pdfab as the process simulator, Splus [43] and Matlab [32] as the statistic computation and graphical engines.** All the tools are integrated into an X window environment by Tcl and Tk [36] 5.2 Tcl and Tk Tcl Tk is a package containing a shell like interpreted language (Tcl) and a Motif like widget set (Tk) developed at the University of California at

The MathWorks, *Matlab User's Guide*, *Matlab Reference Guide*, 1992.

A Buyer's Guide to Conic Fitting - Andrew Fitzgibbon (1995) (12 citations) (Correct)

....the largest eigenvalue. AMS requires the $26n$ flops of LIN to form the $D^T D$ matrix, but negligible additional time to form $D^T x$ $D^T y$ $D^T y$ from the elements of D . The generalized eigensystem routine s mean flop count was 9700, yielding a total complexity of $26n + 9700$ flops. **1 Matlab [7] defines addition and multiplication to each contribute one flop, while Golub and van Loan [4] consider one flop to consist of a multiply accumulate.** The Matlab definition corresponds more closely to the computer used to perform the experiments, on which both multiplication and addition require

....eigensystem is not nonnegative definite, and is solved by the scheme of Gander [3] B2AC requires the $26n$ flops of LIN to form the $D^T D$ matrix. The matrix inversion and eigensystem solution s mean flop count was 5182. **4 Experiments All experiments were conducted using the Matlab system [7].** Eigensystems are solved using the underlying EISPACK routines, while the derivative free minimization needed for the GEOM algorithm used the Nelder Mead simplex algorithm. Also, as the execution speed characteristics of interpreted Matlab programs are qualitatively different to those of

The MathWorks, Inc., Natick MA, USA. *Matlab Reference Guide*, 1992.

Stochastic Models For Performance Analyses Of Iterative... - Casanova (1998) (Correct)

....by our model, the rate function might also take infinite values inside Psi. It seems difficult to find a general analytical expression for the rate function inside Psi, but it is possible to use numerical software to compute the supremum in equation 4.4.12. **For this research, we have used Matlab [28] because it is very straightforward, provides visualization capabilities and seems to give reasonably accurate numerical results.** The next section gives examples of rate functions for a given iterative algorithm in a given distributed environment, and shows how they can be used to estimate

The Math Works Inc. *MATLAB Reference Guide*. The Math Works Inc., 1992.

Computer Graphics and Visualization - Ti On (Correct)

....The current version of MATLAB is able to handle colors and shadings and images and is used in these exercises. You 24 Lab Manual Chapter 2 should be familiar with the tutorial, Elements of MATLAB [Fosdick et al. 95] before reading this chapter. **You may also wish to consult MATLAB manuals [Mat 92a] Mat 92b] For further information on computer graphics, see Fundamentals of Interactive Computer Graphics [Foley et al. 90] A good source of information, specifically on the human eye and color vision, can be found in Gonzalez Woods [Gonzalez Woods 92] and Travis [Travis 91] Concepts and**

....possible to obtain a hardcopy of the image using the print function. **Here the PostScript image is requested by the dps option and is stored in the file named stripes1.ps. For more information on the figure, colormap, image, axes, axis, or print functions, refer to the MATLAB Reference Guide [Mat 92a] or use the help function.** Exercise 2.4.1 Run the program stripes1.m under MATLAB. **Study both the script and the results of running the script. Create and run a new program stripes2.m to do the same thing as stripes1.m, except that it allows the brightness levels of the stripes to increase**

The MathWorks, Inc., Natick, MA. [Aug 1992] *MATLAB: Reference Guide*.

An Implementation of the Active Contour Method for Noisy... - Paplinski, Boyce (Correct)

....As a result of energy minimisation the snake tends to lock on to edges of the image while preserving the continuity of the contour. **The implementation presented in this note is based on the local minimisation algorithm (the greedy algorithm) described by Williams and Shah loc. cit. The MATLAB [5] system has been used as the programming platform.** 2 The Algorithm An active contour is represented as a collection of n points in the image plane, each point being equivalent to a complex number v_i . In MATLAB a contour corresponds to a n element vector of complex numbers. **As images are**

MathWorks, *MATLAB Reference Guide*. The MathWorks Inc., 1994.

Accurate and Automatic Surveying of Beacon Positions for... - Oskarsson, Åström (1998) (Correct)

.... **illustrates the measured angle θ as a function of scanner position $(P_x; P_y)$ scanner orientation P and beacon position $(U_x; U_y)$ Figure 1, according to $\theta(P; U) = \text{atan2}(U_y - P_y; U_x - P_x) - P$ where atan2 is the four quadrant inverse tangent as explained in [5]. The vector $(P_x; P_y; P)$ is called the meter state. The actual measurement θ deviates from the true angle, due to noise and quantisation effects in the laser scanner: $\theta = \theta(P; U) + \Delta\theta$ 2) The position and the heading of the vehicle is calculated using these bearing**

The Math Works Inc. *MATLAB Reference Guide*. The Math Works, Inc., 1992.

On the Nesterov-Todd direction in semidefinite programming - Todd, Toh, Tütüncü (1996) (77 citations) (Correct)

....expressed as an SDP of the form (2) involving symmetric matrices of dimension n Theta n , where $n = 2N$. Again, a feasible starting point is chosen for this problem. **In our experiments, the step length parameter is fixed at $\alpha = 0.98$ throughout, and all the computations are performed in Matlab [11].** For each class, we solve two sets of problems. The first set consists of five instances with random data. **That is, the given matrices are random, with entries chosen from the normal distribution with zero mean and unit variance. For the ETP problem, A is the matrix product of such a random**

The MathWorks, Inc., *MATLAB Reference Guide*. The MathWorks, Inc., Natick, MA, 1992.

A Fully Automated Bandwidth Selection Method for Fitting... - Jean Opsomer Iowa (1998) (Correct)

No context found.

The MathWorks, Inc., Natick, MA. *Matlab Reference Guide*, 1994.

c il Copyright by Shankar Ramaswamy, 1996 - In Regular Scientific (Correct)

No context found.

The Mathworks, Inc., Natick, MA, *MATLAB Reference Guide*, 1992.

Providing Access to High Performance Computing Technologies - Dongarra, Browne, Casanova (Correct)

No context found.

Inc The Math Works. *MATLAB Reference Guide*. 1992.

Modeling With Uncertainty in Continuous Dynamical Systems: The.. - Bontempi (Correct)

No context found.

THE MATHWORKS INC. *MATLAB Reference Guide*, Version 4.0 (1992)

Qua.Si. Ill: a software tool for the simulation of fuzzy... - Bontempi (Correct)

No context found.

THE MATHWORKS INC. *MATLAB Reference Guide*, Version 4.0 (1992)

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[A Protection Scheme for a CORBA Environment - Hagimont, Huet, Mossière \(1997\) \(Correct\) \(1 citation\)](#)
 an application only in terms of the application's **interface**. The idea is implemented by managing protection separation between an application's code and the **definition** of the application's protection policy: of a service (including the programming **language** used to develop it) and the protection policy of
sirac.imag.fr/PUB/97/97-ecoop-wkshp-PUB.ps.gz

[Measuring and Optimizing CORBA Latency and Scalability Over ... - Gokhale, Schmidt \(1998\) \(Correct\) \(15 citations\)](#)
 Transparency Outlined Above. Each Cominterface **Interface** Repository Repository Implementation CORBA, an object is an instance of an **Interface Definition Language (IDL) interface**. The object is their implementation or use. Programming **language**: The **languages** supported by CORBA include C,
siesta.cs.wustl.edu/~schmidt/ieee_tc-97.ps.gz

[A Coordination Kernel for Coupling Heterogeneous Programming... - Bapst, Krone \(Correct\)](#)
 are discussed. We show how a twofold **interface definition language** would improve the are discussed. We show how a twofold **interface definition language** would improve the development phase design of an application, a single programming **language** is not always sufficient to express the
[ftp-liuf.unifr.ch/pub/giral/papers/coupling.ps.gz](http://liuf.unifr.ch/pub/giral/papers/coupling.ps.gz)

[METU Interoperable Database System - Dogac Dengi \(1995\) \(Correct\) \(9 citations\)](#)
 global transaction manager, a schema integrator, **interfaces** to supported database systems and a user currently performed manually by using an object **definition language** (ODL) which is based on OMG's common data model, and a single global query **language** based on SQL. This makes it possible to
[ftp.srdc.metu.edu.tr/pub/mind/papers/sigmodrec95.ps.Z](http://srdc.metu.edu.tr/pub/mind/papers/sigmodrec95.ps.Z)

[Coordinating Distributed Objects With Declarative Interfaces - Narinder Singh \(1995\) \(Correct\) \(9 citations\)](#)
 Coordinating Distributed Objects With Declarative **Interfaces** Narinder P. Singh Computer Science Department, out file postscriptFile) g Figure 1: **Interface Definition Language (IDL) Example**. there is a server that postscriptFile) g Figure 1: **Interface Definition Language (IDL) Example**. there is a server that advertises
cuiwww.unige.ch/OSG/people/jvitek/Resources/Archive/copslaSingh.ps.gz

[Getting CUTE with Matlab - Branch \(1994\) \(Correct\)](#)
 Getting CUTE with **Matlab** Mary Ann Branch y Department of Computer **Matlab**. This report describes this new **Matlab interface** to CUTE and how to use it. y Research
[ftp.tc.cornell.edu/pub/tech.reports/tr194.ps](http://tc.cornell.edu/pub/tech.reports/tr194.ps)

[Hidden Software Capabilities - Hagimont, de Pina, Saunier \(1996\) \(Correct\) \(11 citations\)](#)
 the application code and described in an extended **Interface Definition Language (IDL)** This allows to application developers to wire protection **definition** in the application code, which is detrimental are made available at the programming **language** level, requiring application developers to wire
[ftp.inrialpes.fr/pub/sirac/publications/96-4cdcs-prot-PUB.ps.gz](http://inrialpes.fr/pub/sirac/publications/96-4cdcs-prot-PUB.ps.gz)

[Drafting ER and OO Schemas in Prototyping Environments - Meyer, Westerman, Gogolla \(1996\) \(Correct\)](#)
 alternatively as a prototype of a (simple) user-**interface** for an Entity-Relationship information system. which translate data specifications, schema **definitions**, queries, integrity constraints, and semantically well-founded query and manipulation **language** based on an EntityRelationship calculus. The
www.db.informatik.uni-bremen.de/publications/Meyer_1996_DKE.ps.gz

[Do We Need the Closed-World Assumption in Knowledge Representation? - Hustadt \(1994\) \(Correct\) \(2 citations\)](#)
 system of a database system provides a data **definition language** to describe the conceptual scheme. The of a database system provides a data **definition language** to describe the conceptual scheme. The data the conceptual scheme. The data **definition language** is used to describe the database in terms of a
sunsite.informatik.rwth-aachen.de/Publications/CEUR-WS/Vol-1/hustadt-long.ps

[TOMLAB - An Environment for Solving Optimization Problems in... - Holmström \(1997\) \(Correct\) \(1 citation\)](#)
 Environment for Solving Optimization Problems in **MATLAB** Kenneth Holmstrom 1 Applied Optimization and

parameter estimation. TOMLAB is using MEX-file **interfaces** to call solvers written in C/Cand FORTRAN. programming. ffl Interactive routine for the **definition** and direct solution of linear programming
www.jma.mdh.se/forskning/forskare/.../tom/tom-papers/co-nordic_matlab_1997_stockholm.ps.gz

Using Interface Inheritance to Address Problems in System.. - Graham Hamilton (1994) (Correct) (8 citations)
 Using **Interface** Inheritance to Address Problems in System
suncom.bilkent.edu.tr/tech/projects/spring/papers/versions.ps

An RPC Mechanism for Transportable Agents - Nog, Chawla, Kotz (1996) (Correct) (4 citations)
 remote procedure call (RPC) along with a flexible **interface definition language** (IDL)to add structure to call (RPC) along with a flexible **interface definition language** (IDL)to add structure to inter-agent
ftp.cs.dartmouth.edu/TR/TR96-280.ps.Z

Independently Extensible Systems - Software Engineering.. - Szyperki (1996) (Correct) (25 citations)
 software, open systems, and document-based user **interfaces** are about to revolutionise most areas
 3 -it is not sufficient, leading to the **definition** of the more specific notion of extensibility
 methods, from life-cycle models to programming **languages** to system architectures are at least
www.fil.qut.edu.au/~szyperki/pub/ACSC96.ps.gz

Using Events to Build Large Scale Distributed Applications - Richard Hayton (Correct) (6 citations)
 3QG, United Kingdom Abstract We have extended an **Interface Definition Language** to handle event
 Kingdom Abstract We have extended an **Interface Definition Language** to handle event registration and
 We have extended an **Interface Definition Language** to handle event registration and notification.
ftp.ci.cam.ac.uk/opera/sigops-ew96-events.ps.gz

A Pragmatic Approach to Software Synthesis - Freitag, Margaria, Steffen (1994) (Correct)
 Proc. Acm Popl'94 Post-Conference Workshop On **Interface Definition Languages**, Portland, Oregon, January
 POPL'94 Post-Conference Workshop on **Interface Definition Languages**, Portland, Oregon, January 1994 A
 Post-Conference Workshop on **Interface Definition Languages**, Portland, Oregon, January 1994 A Pragmatic
ftp.uni-passau.de/pub/local/deductdb/papers/FMS94.ps.gz

Interoperability Between Object-Oriented Programming Languages.. - Chen Huang (1995) (Correct)
 code database management system application **interfaces** application programs queries database schemes
 and relational systems, following a generally **definition** on interoperability by Wileden, Wolf,
 Between Object-Oriented Programming **Languages** and Relational Systems J. Chen, Q.M. Huang and
insect.sd.monash.edu.au/research/publications/1995/TR95-21.ps

Information Management in Process-Centered.. - Barghouti.. (1995) (Correct)
 of at least three components: 1) a multiuser **interface**, 2) a process support component, and (3) an
 supports and governs the storage, retrieval, **definition**, and maintenance of the repository data. The
 such as the requirement for a data **definition language** and a data manipulation **language**. The IM
tokio.dbis.informatik.uni-frankfurt.de/REPORTS/GOODSTEP/GoodStepReport023.ps.gz

The TAU Temporal Object Definition Language - Kakoudakis, Theodoulidis (1996) (Correct) (1 citation)
 is a specification **language** used to define the **interfaces** to object types that conform to the TAU
 TimeLab Technical Report The TAU Temporal Object **Definition Language** TR-96-6 October 1996 Synopsis This
www.co.rrist.ac.uk/~timelab/publications/reports/TAU/TR9606.ps

MIX(FL): a kernel language of mixin modules - Ancona (1996) (Correct)
 is not simply a parametric module, since the **interface** which it depends on (corresponding with its
 mixin is an abstract subclass (a class where the **definitions** of some methods are deferred) which can be
 MIX(FL)a kernel **language** of mixin modules D. Ancona Dipartimento di
ftp.disi.unige.it/pub/person/Ancona/D/Disi-TR-96-23.ps.gz

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[YAML: A Tool for Hardware Design Visualization and](#) - Sinha, Doucet, Siska. (2000) (Correct) (1 citation)
hardware modeling, like Cor Java. Projects like **SystemC** [13, 15] Cynlib [5] and OCAP [16] use class features [7] We briefly describe **SystemC** class library, and how we extend it to model structural fundamental building block in the **SystemC** class library [15] is a process. A process is like a C or C
www.ics.uci.edu/~balboa/pubs/sinha-iss00.pdf

[A Design Tool for the TACO Protocol Processor](#) - Virtanen, Lundström. (2002) (Correct)
it generates a **SystemC** model for simulating, a **Matlab** model for estimating the physical characteristics has been specified in the tool, it generates a **SystemC** model for simulating, a **Matlab** model for oriented simulation framework implemented as a library of components. The component library contains
www.tucs.fi/Publications/proceedings/pViLul02a.pdf

[Comparison of SpecC and SystemC Languages for System Design](#) - Cai, Verma, Gajski (2003) (Correct)
Comparison of SpecC and **SystemC** Languages for System Design Lukai Cai, Shireesh
www.cecs.uci.edu/technical_report/TR03-11.pdf

[The Simulation Semantics of SystemC](#) - Mueller, Ruf, Hoffmann, Gerlach. (2001) (Correct) (2 citations)
The Simulation Semantics of **SystemC** Wolfgang Mueller C-LAB/Paderborn University extension. **SystemC** comes as a freely available Clibrary with header files describing the classes and a header files describing the classes and a link library that contains the simulation kernel. A **SystemC**
www.sigda.org/Archives/ProceedingArchives/Date/Date2001/papers/2001/date01/htmlfiles/sun_sgi/././pdffiles/02b_1.pdf

[Using SystemC to Implement Embedded Software](#) - Brijesh Sirpatil James (2002) (Correct)
Using **SystemC** to Implement Embedded Software Brijesh
www.visc.vt.edu/armstrong/hdl2002_sw.pdf

[Automatic Array Alignment in Parallel Matlab Scripts](#) - Milosavljevic, Jabri (1998) (Correct)
Automatic Array Alignment in Parallel **Matlab** Scripts Igor Z. Milosavljević Marwan A. Jabri into C programs with calls to a parallel run-time library. The main feature of the compiler is the same applications were hand-coded using the PBLAS library. The aligned codes were on average 43% faster
www.sedal.usyd.edu.au/~igor/work/publications/aaapms.ps.gz

[SystemC - A modeling platform supporting multiple design](#) - Panda (2001) (Correct)
SystemC - A modeling platform supporting multiple and system levels. Consisting of a class library and a simulation kernel, the language is an level using C/Caugmented by the **SystemC** class library. The class library serves two important
www.capsi.udel.edu/COMPILER/ISSS01/iss01/papers/2001/iss01/pdffiles/p075.pdf

[Modeling Multi-Valued Circuits in SystemC](#) - Große, Fey, Drechsler (Correct)
Modeling Multi-Valued Circuits in **SystemC** Daniel Groe Grschwin Fey Rolf Drechsler approach in this area is **SystemC** which is a Clibrary. To take advantage of **SystemC** in the two multi-valued datatypes. Since **SystemC** is a Clibrary it can be extended to support multi-valued logic
www.informatik.uni-bremen.de/agra/public/Paper/isnvi03_systemc.ps

[MultiMATLAB: Integrating MATLAB with High-Performance](#) - Menon, Trefethen (1997) (Correct) (6 citations)
MultiMATLAB: Integrating **MATLAB** with High-Performance Parallel Computing Vijay
www.supercomp.org/sc97/program/TECHMENON/MENON.PS

[A Methodology for Interfacing Open Source SystemC](#) - Charest, Reid. (2001) (Correct) (1 citation)
A Methodology for Interfacing Open Source **SystemC** with a Third Party Software Luc Charest Michel Abstract **SystemC** is a new open source library in Cfor developing cycle-accurate or more common Cmodeling environment containing a class library and a standard ANSI Ccompiler. Electronic
www.sigda.org/Archives/ProceedingArchives/Date/Date2001/papers/2001/date01/htmlfiles/sun_sgi/././pdffiles/01b_1.pdf

[Reachability Analysis for Formal Verification of SystemC](#) - Drechsler, Große (2002) (Correct)

Reachability Analysis for Formal Verification of **SystemC** Rolf Drechsler Daniel Groe Institute of Computer in Figure 4. In our implementation we used the STL **library** [12] for data structures, like hashtables, Graphics Computer Systems. Standard template **library** programmer's guide.
www.informatik.uni-bremen.de/agra/public/Paper/dsd2002_reach_systemc.pdf

SystemC Based Object Oriented System Design - Virtanen, Truscan, Lilius (2001) (Correct)

SystemC Based Object Oriented System Design Seppo option. It is a recently introduced Cclass **library** for designing executable specifications and Socket FuBase NetControl Bus **SystemC** TACO **Library** sc_object_manager Figure 1: TACO class hierarchy
www.tucs.abo.fi/Pub/2001/Proc/pVITrLi.pdf

High-Level Design of Soft IPs using C++ and SystemC - Damasevicius, Stukys (2002) (Correct)

1 High-Level Design of Soft IPs using Cand **SystemC** Robertas Damasevicius, Vytautas Stukys
soften.ktu.lt/~damarobe/publications/fdi_2002.pdf

An Extension of SystemC for Mixed Multi-Level Communication.. - Siegmund, Müller (2001) (Correct) (1 citation)

SystemC SV An Extension of **SystemC** for Mixed behaviours are retrieved from a protocol **library**. VHDLan extension of VHDL for system level any modification of the code of the **SystemC** class **library** but hooks onto the well-defined user interface,
kreuzas.infotech.tu-chemnitz.de/pub/doc/SieMue_date01.pdf

Towards a New Standard for System-Level Design - Stan Liao Advanced (2000) (Correct) (8 citations)

software. In this paper we present the design of **SystemC**, a Cclass **library** that provides the necessary we present the design of **SystemC**, a Cclass **library** that provides the necessary features for paper, we present the design of the **SystemC** Class **Library** [1]a brief overview of its syntax and usage,
www.sigda.org/Archives/ProceedingArchives/Codes/Codes2000/papers/2000/codes00/htmlfiles/SUN_SGI/./pdffiles/invitec

Elements of MATLAB - Fosdick, Jessup, Schauble (1988) (Correct)

Elements of **MATLAB** Lloyd D. Fosdick Elizabeth R. Jessup Carolyn J.
ftp.cs.colorado.edu/pub/HPSC/ElementsOfMATLAB.ps.Z

Formal Verification Of Ltl Formulas For Systemc Designs - Große, Drechsler (Correct)

Formal Verification Of Ltl Formulas For **Systemc** Designs Daniel Groe Rolf Drechsler Institute Circuits in **SystemC** **SystemC** is a Cclass **library** which allows to describe both software and
www.informatik.uni-bremen.de/agra/public/Paper/iscas03_verification_systemc.pdf

A MATLAB Toolbox for Distributed and Parallel Processing - Pawletta Drewelow (1995) (Correct) (6 citations)

A **MATLAB** Toolbox for Distributed and Parallel Processing are mapped onto the primitives of a programming **library** for interprocess communication and control. The way for a linkage of **MATLAB** with a communication **library**, which are usually implemented in C. The
www.mb.hs-wismar.de/Mitarbeiter/Pawletta/Forschung/Publikationen/zz95_matlab95.ps.gz

Automated Concurrency Re-assignment in High Level System.. - Savoiiu, Shukla, Gupta (2002) (Correct)

Cbased high level modeling frameworks such as **SystemC** [15]Cynlib [2]OCAP [11]etc.model function calls or thread packages. The thread **library** employed can be cooperative or preemptive [10] processes are implemented using the Quick thread **library**[7]It provides a cooperative thread **library**,
www.sigda.org/Archives/ProceedingArchives/Date/Date2002/papers/2002/date02/htmlfiles/sun_sgi/./pdffiles/08e_4.pdf

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[Worst-Case Performance Analysis of Parallel... - Siebenborn... \(2002\) \(Correct\) \(1 citation\)](#)

a method to perform static timing analysis of **SystemC** models, that describe parallel, communicating

www.sigda.org/Archives/ProceedingArchives/Codes/Codes2002/papers/2002/codes02/htmlfiles/sun_sgi/.../pdffiles/2_2.pdf

[Compiler Techniques For Matlab Programs - De Rose \(1996\) \(Correct\) \(4 citations\)](#)

Compiler Techniques For **Matlab** Programs By Luiz Ant Onio De Rose Bach.

vibes.cs.uiuc.edu/People/Postdocs/DeRose/Local_reports/1493.ps.gz

[COSSAP-MATLAB Cosimulation - Lambrette, Schmandt, Post, Mayr \(1995\) \(Correct\)](#)

COSSAP-MATLAB Cosimulation Uwe Lambrette, Bernd Schmandt,

and may consist of hierarchical, predefined **library** models delivered with the tool. In addition, the values and signal streams using a newly developed **library** to **MATLAB**'s external C interface. Even in the

www.iss.rwth-aachen.de/Personen/.../Projekie/Tools/papers/cad_Lambrette95icspai.ps.gz

[SystemC-Based Cosimulation for Global validation of MOEMS - Kriaa, Youssef... \(Correct\)](#)

in **SystemC** and the electro-mechanical part in **Matlab**. For the behavior of optical devices (mirrors, 46 avenue Flix Viallet, 38000 Grenoble France **SystemC**-Based Cosimulation for Global validation of interfaces are generated automatically using a **library** containing simulator interfaces and

tima.imag.fr/publications/files/rr/sbc_140.pdf

[Instituto De Computao - Universidade Estadual De \(2003\) \(Correct\)](#)

(ADL) called ArchC. ArchC is an open-source **SystemC**-based ADL that is specialized for processor several cache levels. A system calls emulation **library** and a binary application loader are in the last

www.dcc.unicamp.br/ic-tr-ftp/2003/03-15.ps.gz

[Efficient Support of Parallel Sparse Computation for Array... - Chang, Chuang, Kuen \(1998\) \(Correct\)](#)

[1]High Performance Fortran (HPF) 14]APL [6]**MATLAB** [9]and possibly Cwith built-in array classes address this open gap by presenting an efficient **library** for parallel sparse computations with Fortran 90

Expressions, And Parallelized With The Help Of Our **Library**. Our Current Testbed Is An Ibm Sp2 Workstation

facon.cs.nthu.edu.tw/~jkleee/papers/ics98_sparse.ps

[MultiMATLAB: MATLAB on Multiple Processors - Trefethen \(1996\) \(Correct\) \(15 citations\)](#)

MultiMATLAB: **MATLAB** on Multiple Processors Anne E. Trefethen Cornell

are compiled into C code with a message passing **library**, PICL [5]and the node computations are done

MATLAB code is translated to C code with parallel **library** routines. This project (and product) aims at

ftp.tc.cornell.edu/pub/tech.reports/tr239.ps

[Benchmarking FALCON's MATLAB-to-Fortran 90 Compiler on an SGI... - De Rose, Padua \(Correct\)](#)

Benchmarking FALCON's **MATLAB**-to-Fortran 90 Compiler on an SGI Power Challenge

in general, the built-ins use the same optimized **library** functions that are called by FALCON's compiler and N and calls specialized routines from the BLAS **library** to compute the solve operation (n) and the

vibes.cs.uiuc.edu/People/Postdocs/DeRose/Local_reports/sbac.ps.gz

[Elements of Matlab - Fosdick, Schauble \(1992\) \(Correct\)](#)

Elements of **Matlab** Lloyd D. Fosdick Carolyn J. C. Schauble 19

ftp.ircam.fr/pub/numerical/programs/systems/matlab/MatlabTutorial.ps.Z

[Refinement of Hybrid Systems from Formal Models to Design... - Romberg, Grimm \(Correct\)](#)

task. While existing design languages like **SystemC** and its extension to the mixed-signal domain, for example in **SystemC**. **SystemC** is a Clibrary which supports the executable specification and a preliminary, we assume some kind standard block **library** exists with a set of arithmetic, boolean

www.broy.informatik.tu-muenchen.de/~romberg/publications/RG03FDL.pdf

[A MATLAB to Fortran 90 Translator and its Effectiveness - De Rose, Padua \(1996\) \(Correct\) \(9 citations\)](#)

- ICS'96. Philadelphia, PA, May 1996 A **MATLAB** to Fortran 90 Translator and its Effectiveness
this program spends most of its time executing a **library** function to calculate eigenvalues. Furthermore,
assignments and spends most of its time computing **library** functions, dimension propagation also has a very
www.csr.d.uiuc.edu/reports/1462.ps.gz

Sparse Matrices In MATLAB: Design And Implementation - Gilbert, Moler, Schreiber (1992) (Correct) (54 citations)

Sparse Matrices In Matlab: Design And Implementation John R. Gilbert
and some of the routines in the Harwell Subroutine **Library** [25] Our work was facilitated by our knowledge
in Sparspak, YSMP, and the Harwell Subroutine **Library**. The **Matlab** version of minimum degree uses many
www.image.cityu.edu.hk/matlab/help/pdf_doc/otherdocs/simax.ps

Improving the efficiency and accuracy of the MATLAB Control... - Sima, Benner, al. (Correct)

Improving the efficiency and accuracy of the **MATLAB** Control Toolbox using SLICOT-based gateways
of the new, public-domain version of the SLICOT **library** (Subroutine **Library** in Control Theory) in
version of the SLICOT **library** (Subroutine **Library** in Control Theory) in comparison with
www.numerik.uni-bremen.de/~benner/pub/mtns98_slicot.ps.gz

Matlab Application for Auditory Physiology - Virkkala, Karjalainen, Pirvola... (Correct)

Matlab application for auditory physiology Jussi
data import management and data acquisition import **library** [2] It is also necessary to switch the
for Windows 3 was used to create dynamic link **library** (DLL) **Matlab** executable (MEX) file. Use of DLL
www.hytti.uku.fi/~virkkala/nmc97.ps

The Parallel Problems Server - Parry Husbands (Correct)

such as Mathematica, Maple, Octave, and **Matlab** exist however, they often fail to work well on
the Server itself use the MPI [3] message passing **library** as the communication mechanism. This is a
as the communication mechanism. This is a standard **library** available on a wide range of platforms it is
theory.lcs.mit.edu/~parry/Husbands_lsbell.ps

Getting CUTE with Matlab - Branch (1994) (Correct)

Getting CUTE with **Matlab** Mary Ann Branch y Department of Computer
ftp.tc.cornell.edu/pub/tech.reports/tr194.ps

TOMLAB - An Optimization Development Environment in MATLAB - Holmström (1998) (Correct)

- An Optimization Development Environment in **MATLAB** Kenneth Holmstrom a a Center of Mathematical
are compiled and linked together with the CUTE **library** and a solver routine. Running the binary
Generated By The Sif Decoder, And The **Matlab** Mex **Library** To Make A Dll (dynamic Link **Library**) File. At
www.ima.mdh.se/forskning/forskare/.../tom/tom-preprints/Annals_of_Operations_Research_1998-tomlab.ps.gz

A Graphical User Interface for Nonlinear Programming in MATLAB - Dotzauer, Holmström (1998) (Correct)

User Interface for Nonlinear Programming in **MATLAB** Erik Dotzauer a Kenneth Holmstrom b a Center
all features in the NLPLIB (NonLinear Programming **LIBRARY**) Toolbox a set of **MATLAB** solvers, test
as part of the NLPLIB (NonLinear Programming **LIBRARY**) Toolbox [8] a set of **MATLAB** solvers, test
www.ima.mdh.se/forskning/forskare/.../tom/tom-preprints/Annals_of_Operations_Research_1998-nlpgui.ps.gz

The SUIF Control Flow Graph Library - Young (1998) (Correct) (1 citation)

The SUIF Control Flow Graph **Library** Cliff Young cyoung@eecs.harvard.edu Division of
Contents 1 Introduction 3 2 Goals for the CFG **Library** 3 3 Philosophy 4 4 Major Classes in the **Library**
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www.eecs.harvard.edu/machsui/machsui-doc/cfg.ps

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A Case for Source-Level Transformations in MATLAB

(1999) (Make Corrections) (7 citations)

Vijay Menon, Keshav Pingali
Domain-Specific Languages

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Abstract: In this paper, we discuss various performance overheads in MATLAB codes and propose different program transformation strategies to overcome them. In particular, we demonstrate that high-level source-to-source transformations of MATLAB programs are effective in obtaining substantial performance gains regardless of whether programs are interpreted or later compiled into C or FORTRAN. We argue that automating such transformations provides a promising area of future research. 1 Introduction... ([Update](#))

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.... within loop nests, several projects have worked on efficient code generation from high level languages such as MATLAB and Maple [11, 24, 25, 26]. While our effort shares some common goals with several of the projects mentioned above, there are also significant differences....

.... within loop nests, several projects have worked on efficient code generation from high level languages such as MATLAB and Maple [6, 18, 19, 20]. While our effort shares some common goals with several of the projects mentioned above, there are also significant differences....

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230 High Performance Compilers for Parallel Computing (context) - Wolfe - 1995

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- 14 A CONLAB compiler for a distributed memory multicomputer (context) - Drakenberg, Jacobson et al. - 1993
- 10 MATLAB Compiler (context) - MathWorks - 1995
- 8 Compiling MATLAB programs to ScaLAPACK: Exploiting task and .. (context) - Ramaswamy, Hodges et al. - 1996
- 7 Parallel Toolbox for MATLAB (context) - Hollingsworth, Liu et al. - 1996
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- 2 KAP for IBM Fortran and C (context) - Associates
- 2 Menhir: An environment for high performance MATLAB (context) - Chauveau, Bodin - 1998
- 2 A MATLAB compilation environment for distributed heterogeneo.. (context) - Project
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- 1 How Do I Vectorize My Code (context) - MathWorks
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Data Movement and Control Substrate for Parallel.. - Chrisochoides.. (1997) [\(Correct\)](#)

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[Getting CUTE with Matlab - Branch \(1994\)](#) (Correct)Getting CUTE with **Matlab** Mary Ann Branch y Department of Computer] this interface was created using the **Matlab MEX-file** facility. The interface is a combination of4 Decoding and compiling test problems 4 5 **Matlab M-files** to access the CUTE tools 6 5.1 Unconstrained<ftp://tc.cornell.edu/pub/tech.reports/tr194.ps>[The OPERA Toolbox for Linear and Discrete Optimization - Holmström \(1998\)](#) (Correct)S-721 23 Vasteras, Sweden E-Mail: Hkh@mdh.se The **Matlab** Toolbox Opera Tb Is A Set Of **Matlab M-Files**,Fortran and C solvers are called from **MATLAB** using a **MEX-file** interface. The focus is on dense problems,The **Matlab** Toolbox Opera Tb Is A Set Of **Matlab M-Files**, Which Solves Basic Linear And Discretewww.ima.mdh.se/forskning/forskare/.../tom/tom-preprints/Annals_of_Operations_Research_1998-opera.ps.gz[MultiMATLAB: Integrating MATLAB with High-Performance... - Menon, Trefethen \(1997\)](#) (Correct) (6 citations)MultiMATLAB: Integrating **MATLAB** with High-Performance Parallel Computing Vijaywww.supercomp.org/sc97/program/TECH/MENON/MENON.PS[A Graphical User Interface for Nonlinear Programming in MATLAB - Dotzauer, Holmström \(1998\)](#) (Correct)User Interface for Nonlinear Programming in **MATLAB** Erik Dotzauer a Kenneth Holmstrom b a CenterFortran and C solvers are called from **MATLAB** using a **MEX-file** interface. A problem is solved either byand C solvers are called from **MATLAB** using a **MEX-file** interface. A problem is solved either by directwww.ima.mdh.se/forskning/forskare/.../tom/tom-preprints/Annals_of_Operations_Research_1998-nipgui.ps.gz[TOMLAB - An Optimization Development Environment in MATLAB - Holmström \(1998\)](#) (Correct)- An Optimization Development Environment in **MATLAB** Kenneth Holmstrom a a Center of Mathematicalsolvers implemented in Fortran or C using a **MEX-file** interface. Currently, **MEX-file** interfacessolvers implemented in Fortran or C using a **MEX-file** interface. Currently, **MEX-file** interfaces havewww.ima.mdh.se/forskning/forskare/.../tom/tom-preprints/Annals_of_Operations_Research_1998-tomlab.ps.gz[A MATLAB MEX-file environment of SLICOT - Mehrmann, Sima, Varga, Xu \(1999\)](#) (Correct)Slicot Working Note 1999-11 A **Matlab Mex-File** Environment Of Slicot 1 VolkerSlicot Working Note 1999-11 A **Matlab Mex-File** Environment Of Slicot 1 Volker Mehrmann 2Contents 1 Introduction 1 2 **MEX** subroutines and m-files 1 3 Numerical results 8 4 Conclusion 25wgs.esat.kuleuven.ac.be/pub/WGS/REPORTS/SLWN1999-11.ps.Z[TOMLAB - An Environment for Solving Optimization Problems in... - Holmström \(1997\)](#) (Correct) (1 citation)Environment for Solving Optimization Problems in **MATLAB** Kenneth Holmstrom 1 Applied Optimization andleast squares parameter estimation. TOMLAB is using **MEX-file** interfaces to call solvers written in C/Csquares parameter estimation. TOMLAB is using **MEX-file** interfaces to call solvers written in C/Candwww.ima.mdh.se/forskning/forskare/.../tom/tom-papers/co-nordic_matlab_1997_stockholm.ps.gz[A MATLAB Toolbox for Distributed and Parallel Processing - Pawletta Drewelow \(1995\)](#) (Correct) (6 citations)A **MATLAB** Toolbox for Distributed and Parallel Processing. Prerequisite is **MATLAB's** programming interface (**MEX**) to external software [4]It opens the way for awww.mb.hs-wismar.de/Mitarbeiter/Pawletta/Forschung/Publikationen/zz95_matlab95.ps.gz[Matlab Application for Auditory Physiology - Virkkala, Karjalainen, Pirvola...](#) (Correct)**Matlab** application for auditory physiology Jussicreate dynamic link library (DLL) **Matlab** executable (**MEX**) file. Use of DLL instead of relocatableauditory physiology. We have used **Matlab** executable files to control a data acquisition card. Thewww.hytti.uku.fi/~virkkala/nmc97.ps[SLICOT - A Subroutine Library in Systems and Control... - Benner, Mehrmann.. \(1997\)](#) (Correct) (5 citations)and widely accepted standard environment like **Matlab** 1 by an appropriate interface. Such anwww.math.uni-bremen.de/zetern/numerik/Published/Report960.ps.gz

The NLPLIB Toolbox for Nonlinear Programming in MATLAB - Holmström (1998) (Correct)

1 The NLPLIB Toolbox for Nonlinear Programming in **MATLAB** Kenneth Holmstrom a a Center of Mathematical Fortran and C solvers are called from **MATLAB** using a **MEX-file** interface. A problem is solved either by and C solvers are called from **MATLAB** using a **MEX-file** interface. A problem is solved either by direct
www.ima.mdh.se/forskning/forskare/.../tom/tom-preprints/Annals_of_Operations_Research_1998-nlplib.ps.gz

MADE: an Effective Workbench for the Development of... - Bulfone, Lonza, Scafuri (Correct)

Italy Abstract A powerful workbench called MADE (**Matlab**-DSP Environment) has been developed to boost the **Matlab** workspace. Each command is implemented as a **MEX-file**, which is the usual way adopted to interact workspace. Each command is implemented as a **MEX-file**, which is the usual way adopted to interact with
www.aps.anl.gov/calepcs97/paper97/p150.pdf

Comparing Mostly-Copying and Mark-Sweep Conservative Collection - Smith, Morrisett (1998) (Correct) (8 citations)

reclaim unused memory. We introduce a new collector, **MCC**, based on an extension of mostly-copying
simon.cs.cornell.edu/Info/People/fms/Papers/fsmith_mcc.ps.gz

Benchmarking FALCON's MATLAB-to-Fortran 90 Compiler on an SGI... - De Rose, Padua (Correct)

Benchmarking FALCON's **MATLAB**-to-Fortran 90 Compiler on an SGI Power Challenge generated by a commercial **MATLAB** to C compiler (**MCC**) 14]and Fortran 90 hand coded programs for the two types of functions in **MATLAB**: built-ins and M-files. Built-in functions are intrinsic functions, such
vibes.cs.uiuc.edu/People/Postdocs/DeRose/Local_reports/sibac.ps.gz

Optimization Over Symmetric Cones - Nayakkankuppam (1999) (Correct)

of sparsity. Our implementation is partly in **Matlab** (bundle management, eigenvalue routines) and 69 viii List of Figures 3.1 Performance of HOC, **MCC**, SAFE Vs. BASIC .
www.cs.nyu.edu/csweb/Research/Theses/nayakkankuppam_madhu.ps.gz

Compiler Techniques For Matlab Programs - De Rose (1996) (Correct) (4 citations)

Compiler Techniques For **Matlab** Programs By Luiz Ant Onio De Rose Bach.
vibes.cs.uiuc.edu/People/Postdocs/DeRose/Local_reports/1493.ps.gz

TOMLAB - A General Purpose, Open MATLAB Environment for Research... - Holmström (1998) (Correct)

TOMLAB -A General Purpose, Open **MATLAB** Environment for Research and Teaching in commercial solvers written in FORTRAN or C/Cusing **MEX-file** interfaces. Currently **MEX-file** interfaces solvers written in FORTRAN or C/Cusing **MEX-file** interfaces. Currently **MEX-file** interfaces have
www.ima.mdh.se/tom/tom-software/.../tom-prints/print-ima_tom-1997_03.ps

A Case for Source-Level Transformations in MATLAB - Menon, Pingali (1999) (Correct) (6 citations)

A Case for Source-Level Transformations in **MATLAB** Vijay Menon Department of Computer Science Is Given In Section 2. Section 3 Discusses How The **Mcc Matlab** To C Compiler Attempts To Eliminate These
www.cs.cornell.edu/Info/Projects/Bernoulli/papers/dsi99.ps

An Incorporated Use of Genetic Algorithm and a Modelica... - Hongesombut, Mitani.. (2002) (Correct)

physical models and its powerful interface with **MATLAB** and Simulink that can allow ObjectStab be used with a GA. One of the most powerful features of **MEX files**, including C format S-functions is it allows with a GA. One of the most powerful features of **MEX files**, including C format S-functions is it allows ones
www.modelica.org/Conference2002/papers/p12_Hongesombut.pdf

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